



CATS AND COMIRA AS ONE ENTITY SUBMITTED OUR APPLICATION FOR COLE MANAGER STATUS RECENTLY. IT HAS COME TO OUR ATTENTION THAT AN ERRANT PAGE-28 HAS BEEN POSTED ON THE NOTIFICATION WEBSITE.

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THE INFORMATION YOU NEED, DOCKET #, FILE DATE, DOCUMENT #, ETC. IS BELOW MY SIGNATURE.

THANK YOU.

RESPECTFULLY SUBMITTED,

RORY

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PROPOSAL FOR COMIRA AND CATS TO BE DESIGNATED AS AN FCC COLE MANAGER

Commission's Secretary,
Office of the Secretary,
Federal Communications Commission
Regarding: Commercial Operator License Examination Managers
WT Docket Number 98-228
445 12th St. S.W. Room TW-A325
Washington, D.C. 20554
APRIL 19, 2013.



COMIRA AND CATS COMPANY INFORMATION

Mailing Address

Comira brand and CATS branded test centers

Comira – d.b.a. Computer Assisted Testing Service, Inc. (CATS)
777 Mariners Island Blvd, Suite 200
San Mateo, CA 94404
800.947.4228 (Toll-Free Phone)

Online

Comira brand Corporate Website:

<http://www.comiratesting.com>

Comira brand Testing Center Locations:

<http://candidate.comiratesting.com/comira/sitesearch.php>

CATS brand Corporate Website:

<http://www.catstest.com/index.php>

CATS brand Testing Center Locations:

<http://candidate.catstest.com/allsites.php>

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Executive Summary

1. Description of this entity desiring to be certified and qualifications.

Comira and CATS are two brands, under one ownership - for proctored computer test services.

Comira is a full service testing company for licensure, certification, assessment, and educational testing programs. We provide expertise throughout the entire testing lifecycle, including test development, computer-based testing, and result management.

Comira blends psychometric expertise, candidate conveniences, and technical innovation for an unparalleled customer experience.

With a dedicated team of professionals, 230+ testing centers, and technology to support even the most complex testing programs, Comira is one of the most trusted computer-based testing providers in the industry.

CATS, Computer Assisted Testing Service, Inc. is a category leader in the deployment of high-stakes examinations for the U.S. Federal Aviation Agency. CATS has over 340+ locations and is one of two domestic companies authorized to conduct these government exams. CATS has been an important business partner to the Federal Aviation Administration, providing FAA tests since 1993.

COMIRA and CATS Secured and Proctored Test Sites

A competent test administration staff manages the licensed exam centers. Comira and CATS sites are trained continuously by corporate and meet rigorous quality control standards. Comira and CATS testing sites have a solid record of test security, with comprehensive, prompt, and accurate reporting of test results to our clients.

Comira and CATS have a proven record of accomplishment to manage, deploy computer-based exams. Our test development services are also available if needed, to build new content or to validate licensing examinations for the FCC. We have not included those services in this proposal.

2. How this applicant will prevent conflicts of interest.

- a. All candidate data, FCC test forms, scoring and operational arrangements are held in our secure servers, transmitted securely to proctored locations, and test content, scores and candidate data has limited access to only senior Comira/CATS corporate management.
- b. At this time Comira and CATS does not have any business relationships with RF equipment manufacturers who publish test guides. Should firms wish to engage Comira and CATS for Radio Frequency (RF) related exams or e-Learning, Comira, and CATS will notify the FCC of any potential e-Learning or exam sponsor with RF related content, even to those with no known requirement for an FCC license.
- c. As of this date, the only exam that is partially related to "RF" is with the National Center for Aerospace and Transportation Technologies. NCATT Certifications demonstrate the knowledge base of the advanced aerospace technician to promote integrity, safety, and professionalism in the aerospace workforce.



3. Applicant's proposed fee structure.

A per candidate test fee of \$60 for the first element, \$30 for an added element and up two added elements per day.

We propose no free re-takes, unless there is a system irregularity, which in turn will be reported to the FCC.

4. Applicant Corporate Experience and Ability with FCC exams

The CATS brand has been working with **Sea School** as a FCC exam sub-contractor for many years and now desires to be a direct COLE manager. As a company, Comira and CATS have been involved in testing since 1993 and computer-based testing since 1995. Our intent is to offer all the elements of the FCC exams *only on computer* at both our Comira and CATS branded proctored exam centers. Please see proposal pages six and seven for the company background.

5. Areas to give exams

Comira and CATS branded testing centers are geographically well distributed across the USA, its territories and several offshore locations. Comira sites are situated on college and community college campuses and CATS sites are situated at Fixed Base Operator (airports) locations with flight training, aircraft and technology related schools and colleges with an aviation program.

It is our intent to distribute the exams in the USA and its territories.

6. Frequency

It is our intent to offer the exams on-demand at our Comira and CATS test centers, on a daily basis.

7. Time line

As CATS is already deploying the FCC exams under *Sea School*, once the FCC approves Comira and CATS as a primary COLE manager, we can then have the program ready to go under our full deployment in a few days.

Please review the remainder of this document for details about our company and experiences.

Respectfully submitted,

Claude E. "Rory" Rorabaugh, Director of Sales and Marketing, Comira brand



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COMIRA – COMPANY BACKGROUND

Comira Testing, a brand of Computer Assisted Testing Service (CATS), and like CATS, offers client-centered, candidate-focused, results-driven examination and psychometric services. Our corporate commitment to client responsiveness and customer service is unsurpassed. Our state-of-the-art data systems and IT infrastructure gives our clients the crucial flexibility to meet the ongoing needs of their examination programs. Comira and CATS has over two decades of successful exam development and exam delivery for public and private industries. Our psychometrics team is adaptive, innovative, and responsive to clients' needs.

Adaptive

Although not a requirement for the FCC COLE designation, if the FCC requests test development or validation work, Comira's psychometric staff is well equipped to work with your team to create customized testing solutions.

Innovative

Comira's psychometric division works closely with our programming and software division to design innovative and intuitive user-friendly applications. *Remote Item Authoring System* (RIAS) is our essential web-based item development software package. RIAS is a secure environment for the development of items and examinations in either remote or face-to-face settings.

Responsive

Our psychometric team members work directly with our clients, subject matter experts, and test candidates to provide prompt and accurate responses to inquiries regarding the exam development process. We strive to align all aspects of the exam development and delivery to meet clients' unique needs and ensure a smooth and headache-free process.

Comira's psychometricians combine rigorous academic education and exam development experience to provide tailored consultation services and effective solutions. Comira is committed to developing open and communicative working relationships with clients and subject matter experts to ensure the delivery of high-quality customer care and exam development solutions that exceed client expectations.

Comira and CAT's Examination Services

Our registration system allows for flexible scheduling for year-round testing, fixed-duration testing windows, and/or specific testing events. Comira and CATS has for a new exam sponsor no initial set up costs, network fees, or editorial change fees. Our clients may enjoy complimentary, unlimited



use of Remote Item Authoring Service (RIAS)—our proprietary item authoring and banking system. Our in-house call center fully supports you and your candidates

Comira’s Remote Item Authoring System (RIAS) is state-of-the-art.

Our exam deployment software is more flexible, more secure than other competing systems. Comira maintains an in-house team of experienced programmers and web design professionals to provide quick, responsive action in tailoring our systems to the unique needs of each client. RIAS, our proprietary item authoring system, offers our clients one of the most flexible and adaptable item writing and test building systems in the industry. Moreover, RIAS is more than just a claim we make—RIAS is a live and mature system, already in operational use by our clients.

Comira’s and CATS Test Center Network

Comira and CATS has among the most extensive corporate experience in managing a comprehensive test center network. Our ownership has hands-on experience since 1993 in Computer-Based Testing (CBT).

Comira as a brand is the *quiet* leader in the industry, maintaining several long-term relationships with high profile and high stakes exams for the Federal government, several states, and not-for-profits.

CATS, has been administering the FCC exams under the auspices of the *Sea School* for many years. We now desire to have our CATS proctored test sites and Comira proctored test sites become a direct provider of the FCC exams.

Comira’s Psychometric Services

Comira’s in-house team of PhD level psychometricians can handle all phases of the cycle of test development, administration, scoring, and reporting. Additionally, for content areas outside the expertise of our test development specialists, we are able to bring in leading experts in such fields.

What truly sets Comira and CATS apart from all the rest?

At Comira and CATS, our most essential responsibility is to both provide our clients with excellence in customer service and their examination candidates with excellence in their testing experience. We focus on using our ability to work creativity, nimbly, and accurately with our clients to meet their needs and maintain satisfying, long-term partnerships with them.

You will not hear a “NO” to a client request, or get “nickelled and dimed” by narrowly defined scopes of work. In addition, as an organization, we have the ability to bring in other professional assets for a project as well as cooperating with other vendors as your overall project manager.



COMPUTER-BASED TEST ADMINISTRATION WITH COMIRA AND CATS

As a company we custom designed and built our own software and hardware infrastructure from the ground up and continue to refine infrastructure to address the progress of technology. The experience of our key staff members permits Comira to rapidly respond to our clients' needs and readily adapt our test driver to meet our clients' business requirements.

Comira's item banking software, RIAS, can easily import the existing examination items, item banks and test forms. Comira's item banking software and its CBT test centers' computer equipment has in the past and can easily accommodate your needs now and into the future.

TEST DELIVERY SYSTEM

Although you may not need all the features we offer, the test delivery module can accommodate a wide variety of test formats (e.g., scenario and passage items with or without graphics, images and video clips, and multiple-choice, true/false and matching questions) and supports multiple languages (e.g., English, Spanish and French). The module delivers a secure environment for the administration of a test.

The test driver controls the selection of test questions, ensuring that customer needs are met with regard to the administration of tests. Candidates can navigate easily through the questions and receive a variety of question formats. Selection of answer choice is with either the keyboard or a mouse click.

Features of the Test Driver

- ✓ User friendly GUI (Graphical User Interface)
- ✓ Full screen area with large test question display
- ✓ Intuitive layout
- ✓ Graphic images, movies, and sound files
- ✓ Font and font size adjustment and selection
- ✓ Built-in calculator
- ✓ Reference items graphically displayed
- ✓ Drop-down menu with link to allowable resources

Easy Navigation

- ✓ Question tree displays the current state of all questions.
- ✓ Question tree may be used to select any question in the test and or passage.
- ✓ Navigation buttons (i.e. Next, Previous, Figure, Image, Font).
- ✓ Mark (bookmark) button allows candidate to tag a question for later review.



Candidate Features

- ✓ Time clock showing time remaining.
- ✓ Number of questions answered and unanswered.
- ✓ Time clock reminders at 15 and 5 minutes prior to end of exam.
- ✓ Exam graded/scored upon completion of test and survey.
- ✓ Supplemental information available on screen.

Test Developer/Client Features

- ✓ Wide offering of question types (multiple choice, true/false, multiple pick, short answer, constructed response, passages (aka testlets—a collection of items that share a common stimulus)).
- ✓ Randomization of questions by test (linear exams).
- ✓ Unlimited number of combinations of tests can be administered simultaneously.
- ✓ Unlimited number of locations can administer multiple versions of the same exam.
- ✓ Applicant test results immediately available through Comira's client application program.

Security Features

- ✓ Other applications and the Internet are not accessible during examination.
- ✓ Fault tolerant; fully recoverable from power, Internet and hardware failures.
- ✓ Proctor login requirement to begin application.
- ✓ Applicant and proctor login to begin exams.
- ✓ Applicant data verification before and after exam.
- ✓ Applicant test verification screen.
- ✓ Test questions and passages cached in memory, not written to hard drive.
- ✓ All test information is encrypted.
- ✓ All test data remains in Comira's centralized database, no test data is stored on the client machine.
- ✓ Site survey presented prior to scoring of exam.
- ✓ Exam section completion report/print out.

Screenshots of Comira's test delivery system are presented in Figures A, B, and C, as examples of the system's features.

Figure A – Passage Question Displayed as Split Screen and as Thumbnails

This screenshot displays a sample passage—in this case, a set of five items that share a common setup or stimulus. These five items are displayed as thumbnails across the top for quick reference. The current item (the second of the five items) is displayed in a split screen format. There is vertical display of all passages and items, with clear indication of state. Questions are selectable via the vertical display, thumbnails, and “Next,” “Previous” buttons.

01:38:54

32. What is the express...
 A. $2\pi\sqrt{L/g}$...
 B. $(L/g)^{1/2}$...
 C. $(g/L)^{1/2}$...
 D. $2\pi\sqrt{mg/L}$

33. The Jakarta project...
 A. g_0 ...
 B. θ_0 ...
 C. θ_0 ...
 D. θ_0 ...

34. If all the resistor...
 A. 120 mA
 B. 60 mA
 C. 240 mA
 D. 30 mA

35. What is the magnitu...
 A. $mg\cos\theta$
 B. $mg\sin\theta$
 C. $mg\sin\theta$
 D. mg

36. What mechanism supp...
 A. Gravitational force...
 B. Electron transfer
 C. Stretching bond len...
 D. Magnetic forces

Questions: 77
Answered: 6
Remaining: 71

PS

- [-] Passage
 - Q-1
 - Q-2
 - Q-3
 - Q-4
 - Q-5
- [-] Passage
- [-] Passage
- [-] Passage
- [-] Passage
 - Q-23
 - Q-24
 - Q-25
 - Q-26
- [-] Passage
 - Q-27
 - Q-28
 - Q-29
 - Q-30
 - Q-31
- [-] Passage
 - Q-32
 - Q-33
 - Q-34
 - Q-35
 - Q-36
- [-] Passage
- [-] Passage
 - Q-49
 - Q-50
 - Q-51
 - Q-52
 - Q-53
- [-] Passage

☐ Unanswered
☒ Answered
☐ Marked
☐ Mark-Answered
☐ Passage

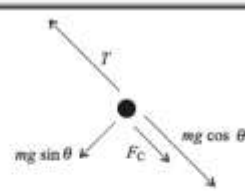
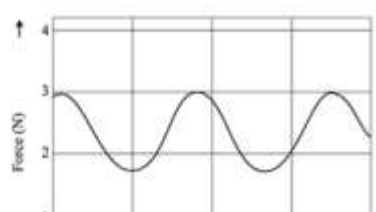


Figure 1 Pendulum variables and forces

In SSL, all data sent is encapsulated in a record, an object which is composed of a header and some non-zero amount of data. Each record header contains a two or three byte length code. If the most significant bit is set in the first byte of the record length code then the record has no padding and the total header length will be 2 bytes, otherwise the record has padding and the total header length will be 3 bytes. The record header is transmitted before the data portion of the record.



32. What is the expression for the angular frequency ω of a pendulum?

☒ A) $2\pi(g/L)^{1/2}$
☐ B) $(L/g)^{1/2}$
☐ C) $(g/L)^{1/2}$
☐ D) $2\pi mg/L$

Fonts
Periodic Table
Calculator
Mark
Previous
Next
Finish

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Figure B – Passage Questions Containing Images as Item Alternatives

Below, the fifth out of five items from this passage is shown. Notice the four item response alternatives are image. Both images and text can appear in the item stem, as well as any (or all) item response alternatives.

01:36:52

Questions: 77

Answered: 12

Remaining: 65

13. The effect of tempe...

A. Tube 4

B. Tube 3

C. Tube 6

D. Tube 2

14. The results in Tabl...

A. (NH₄)

B. Na₂S

C. starch to Solution...

D. KI(aq) to Solution...

15. In Tube 6, what is ...

A. Inhibitor

B. Indicator

C. Catalyst

D. Reactant

16. The solution in Tub...

A. concentrations of I...

B. average kinetic ene...

C. concentration of st...

D. rate of Reaction 2 ...

17. Which graph best sh...

A. [image]

B. [image]

C. [image]

D. [image]

PS

- Passage
- Q-1
- Q-2
- Q-3
- Q-4
- Q-5
- Passage
- Q-13
- Q-14
- Q-15
- Q-16
- Q-17**
- Q-23
- Q-24
- Q-25
- Q-26
- Passage
- Q-27
- Q-28
- Q-29
- Q-30
- Q-31
- Passage
- Q-32
- Q-33
- Q-34
- Q-35
- Q-36
- Passage
- Q-49

Unanswered

Answered

Marked

Mark-Answered

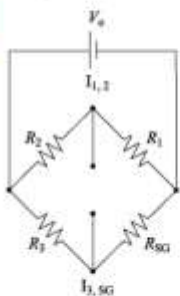
Passage

The secure hypertext transfer protocol (HTTPS) is a communications protocol designed to transfer encrypted information between computers over the World Wide Web.

$$2\text{I}^-(\text{aq}) + \text{S}_2\text{O}_8^{2-}(\text{aq}) \rightarrow \text{I}_2(\text{aq}) + 2\text{SO}_4^{2-}(\text{aq})$$

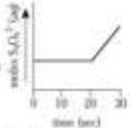
Reaction 1 (slow step)

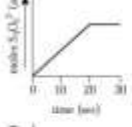
Developed from the outset as object-oriented programming technology, Java provides a high level of code reliability, flexibility and modularity. Also, Java is one of the first programming languages to consider security as part of its design.

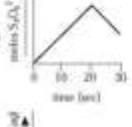


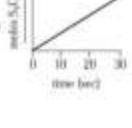
Reaction 2 (fast step)

17. Which graph best shows the acceleration of the particles?

A) 

B) 

C) 

D) 

Fonts

Periodic Table

Calculator

Mark

Previous

Next

Finish

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Figure C – Different Item Types Combined into a Form

Larger images, figures, audio/visual clips can be incorporated into test questions. When the “Figure” thumbnail button is clicked, a separate image viewer window opens that displays the full-size image.

00:59:02
Questions: 20
Answered: 4
Remaining: 16

(Refer to figure 19). Which repair should be made if the gear switch was placed in UP position and the gear does not retract?

☐ A) Replace electrical wire No. 12.
☐ B) Replace electrical wire No. 15.
☐ C) Replace the down limit switch.

Figure 19



SAM
Question 1
Question 2
Question 3
Question 4
Question 5
Question 6
Question 7
Question 8
Question 9
Question 10
Question 11
Question 12
Question 13
Question 14
Question 15
Question 16
Question 17
Question 18
Question 19
Question 20

Unanswered
Answered
Marked
Mark-Answered

Mark Previous Next Calculator Finish

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CANDIDATE REGISTRATION FOR TEST SITES

Candidate Management

CATS and Comira have established processes to accept eligibility files from the client for candidates who the client has determined are eligible to sit for the examinations. Upon receipt and uploading of candidate eligibility data, candidates may schedule their exam by toll-free telephone, fax, Internet and mail during their testing window. When calling a CATS/ Comira toll-free number, a candidate can speak to a live representative between the hours of 6:00 am to 5:00 pm Pacific Monday through Friday and Saturdays and Sundays 7:00AM to 3:30AM PT.

Exams registered for a single candidate are scheduled to a specific test site and time slot. CATS/Comira's scheduling system is centralized to ensure that most candidates are able to register on their first-choice date. This is possible due to our extensive network of testing centers and seating capacity.

CATS/Comira can offer full-service scheduling capabilities to ensure that a candidate cannot take the exam at multiple sites per application, will be positively identified with a fail-safe mechanism, and can smoothly initiate an examination.

CATS/Comira's computer testing system is very secure and will not allow unapproved candidates to take the exam. Unapproved candidates may be locked out via pre-registration (preloaded candidates) or via an approval code issued by the client to be entered either during the time of registration or test login. Comira's computer registration and testing system can track specified testing windows and candidate retake policies and is very secure. It will ensure that registration for the examination conforms to specific testing windows, retake policies, and not allow unapproved candidates to take an examination.

Candidates are verified with Government Issued ID. You may have other forms of "ID" for the proctor to use and we can accommodate those needs. Candidates are required to enter their approval code/ID number at the beginning of the exam.

Once an examination is scheduled, the candidate receives a confirmation email.

Client Access to Data and Summary Reports

CATS/Comira's test delivery software will allow the client's staff to access online data immediately through a secure method. Raw and summarized data such as the number of candidates registered for each test site as well as summary reports that include the number of candidates registered per site, per test form with the names and identifications numbers for each candidate, item, and test performance data. In addition, if the client desires hard-copy reports of this information, Comira will forward the appropriate reports weekly, monthly and/or annually.



Candidates will be able to reach CATS/Comira's registration/customer service representatives by toll-free telephone or electronically through email from 6:00 am to 5:00 pm PDT Monday through Friday and Saturdays and Sundays 7:00AM to 3:30AM PT. All email inquiries will be responded to within one business day of receipt by CATS/Comira. In addition, technical staff is available during business hours for client assistance.

CATS/Comira can also offer Internet registrations should you desire such service.

CATS/Comira's Client Application Program, RIAS

CATS/Comira's client application program, RIAS, is used to provide the client with secure and direct access to its item bank, test forms, and candidate registration and test data. If you desire, CATS/Comira can provide full training in the use of RIAS.

RIAS Item Banking Features

The following is a just partial list of features of the RIAS item banking software:

- ✓ Fully-online collaborative authoring and editing of all items.
- ✓ Test form development and review.
- ✓ Search flexibility – Data is incorporated regarding linkages to the content specifications, dates of creation and revision, cumulative item statistics, and item reference sources.
- ✓ Flexible question formats are supported including multiple-choice, multiple pick, short answer and true-false.
- ✓ Graphics (e.g., BMP, GIF, JPEG, TIFF), symbols (e.g., Microsoft Equation Editor), and movies (AVI, FLASH) and sound (WAV) can be attached to items.
- ✓ Drill-down capabilities that allow users to start with a candidate's name and continue all the way down to the P-value of any item of that candidate's exam.
- ✓ Online candidate records, including the ability to view candidate's test results question by question as soon as the test has been completed.
- ✓ Online download of candidate test results in a predetermined format.
- ✓ Statistical reports, including total tests administered, total candidates scheduled, total no-show candidates, specific test site data, etc.



SECURITY AND TECHNOLOGY CAPABILITIES

CATS/Comira prides itself on achieving zero-breach security in 20 years of operation.

Corporate Privacy Policy

CATS/Comira has not and will not divulge any information to any outside agency or persons unless authorized by the client. If this information pertains to individuals, then both the client and the individual must provide their consent for release of the information.

Corporate Physical Site Security

1. Data Exchanges - Transfer of electronic files for eligible candidate lists and/or client and examinee performance reports is performed either through an SSL connection or through a secure FTP site.
2. Protocols, Standards and Formats - Comira stores all data in Microsoft SQL servers within our in-house data center and can accept or transmit a variety of data formats.
3. Any information transmitted through the Internet uses industry standard 128 bit Secure Sockets Layer (SSL). In addition to SSL, there is an additional form of 128-bit encryption that is used while exams are being administered at testing workstations.
4. Only key Comira personnel have access to candidate personal or demographic information; or test content.
5. Comira maintains a secure data center on site that is electronically and environmentally monitored. Industry standard security protocols are enforced. All data storage devices are secured in this room.
6. Auditing and monitoring tools are used to track database operations in order to detect internal or external security breaches.
7. The data center is protected by a TRUE A+B high availability electrical system, a TRUE A+B dual-carrier data transmission system utilizing Border Gateway Protocol, intrusion protection systems, redundant environmental control systems, and a primary clean agent fire suppression system backed up by a pre-action fire suppression system. In addition full battery backup capability is available for a minimum of 72 hours.



8. Our servers in San Mateo are mirrored off site in real-time to a Folsom, CA co-location which outside the Bay area earthquake zone.

Detecting and Reporting Suspected Irregularities

CATS/Comira has never experienced any irregularities in data security. However, if a breach were reported by auto detection or other means, identification and blockage of an intruder would be executed immediately. Comira is required to contact Federal authorities upon detection of an intruder or other breach of security.

Any irregularities taking place at a testing center would be reported to the customer immediately. This information would be documented and made available within 24 hours. Resolution of any incident or breach of security would also be reported, documented and archived.

On-Site Monitoring

Multiple levels of training and security ensure integrity of the on-site testing process. An Operations Manual outlining specific procedures and requirements is delivered to each testing site. Testing center supervisors use this to train the on-site staff and then document the successful completion of the training process. We also do physical site inspections of many of our Comira/CATS test center licensees and on-site and/or remote audits on a regular basis.

Auditing and Monitoring Tools

Further, auditing, and monitoring tools are used to track database operations in order to detect internal or external security breaches from unauthorized users of a database or changes made to a database. Comira's and CATS auditing and tracking systems meet and exceed industry and government standards.

Incident Summary Reports

Any irregularities in the testing process, including cheating behavior and other examination administration issues will be thoroughly investigated by Comira and CATS - immediately and reported to the client. As previously indicated Comira has never had a breach in security at any of its test centers.

Examinations will be terminated immediately when a candidate is caught cheating, e.g., using notes, talking or attempting to view another candidate's computer screen, unless otherwise directed by the client. Additionally, candidates caught cheating will be prohibited from taking future examinations, unless otherwise directed by the client. Documentation along with any evidence collected will be made



available within the next business day. Resolution of any incident or breach of security will also be reported, documented and archived.

Examinations, which are interrupted during a power outage, are fully recoverable. As the candidate progresses through the examination, the status of each item is written to an encrypted cache file on the client machine. This string records time spent on question, answers marked for review, and the candidate's response.

Once power has returned, the test driver recalls the same test form from Comira's server and then loads the encrypted cache file from the hard drive. This restores the examination to the exact state prior to the power outage. The examination items are not stored on the hard drive at the test center location; therefore, they are retrieved from CATS/Comira's server at its corporate offices.

The encrypted cache file is destroyed upon completion of the examination.

Accommodations for Persons with Disabilities

All candidates have access to professional, standardized accommodations. Additionally, special accommodations are available for examinees that have a disability as that term is defined in the Americans with Disabilities Act. All requests are reviewed, and when warranted, reasonable accommodations will be provided in light of the applicant's specific disability.

Comira branded and CATS branded Testing Center networks

1. The Comira brand (*non F.A.A. exam sites*) has 230+ testing centers throughout the United States.
2. The F.A.A. test center network branded under CATS brand has 340+ locations in the US, its possessions and several foreign countries.

For the Comira brand, we are now in the process of acquiring the testing locations that were part of the ACT collegiate network, and other similar sites. Our objective is by the January 2014 is to have 500+ both in the US and Canada combined. In Canada, we work with the Yardstick test center network on a case-by-case basis with access to their 50 locations in major communities. For the purposes of this proposal, we do not plan to offer the FCC exams outside the USA or its possessions. However, if the FCC desires to offer the exams outside, we can immediately accommodate the request.

All testing centers are required to adhere to the following minimum standards:

- ✓ A minimum of three testing stations must be provided. Testing centers range in size from three to 78 testing workstations.
- ✓ The testing centers are located in a professional building, with a clean and well-organized interior, heating and ventilation, and adequate parking.



- ✓ Rooms are located away from noise and distractions.
- ✓ Testing areas are off limits to all but the test proctor, Testing Center Supervisor and the test applicants while tests are in session.
- ✓ There must be adequate and appropriate lighting to easily read test material without causing glare on the computer monitor screens.
- ✓ Most testing centers are open during normal business hours of 9:00 am to 5:00 pm. Many testing centers are also open on weekends.

KEY COMIRA COMMITMENTS...

- ✓ Commitment to work with you in market development concepts to expand reach and awareness.
- ✓ Commitment to work with you for a perfect client and candidate experience.
- ✓ Comira desires to be the total project management solution.
- ✓ We promise no nuisances such as set up fees, editorial fees, change fees, and network fees.



COMIRA PERSONNEL

Geraldine Celestre

Chairman and CFO

CAREER PROFILE	Over 34 years of creating and managing successful businesses, from start-up single owner enterprises, to private corporations in the fields of real estate development, import-export, aviation charter, aircraft leasing, and certification examinations. A founder of Accuimage, Inc. a medical imaging company eventually sold to GE. Experience also includes 10 years of managing stock and bond portfolios.
PROFESSIONAL EXPERIENCE	<p>1992-Present Computer Assisted Testing Service, Inc., Comira CFO & CEO 1992- March 2012 Chairman and CFO March 2012- Present</p> <ul style="list-style-type: none">• With a vision of innovation, service and stability, created the format and development of a fledgling FAA testing program into the solid full service testing company that exists today with over 30 employees and about 500 testing centers.• Maintains active open relationships with all Boards, Federal, and State Agencies who rely on our expertise and service.• Manages the Company with strong financial structures, and a long standing goal of financial stability and return on investment.• Manages all corporate, shareholder, and legal matters. <p>1986-1998 Co-developed, managed and sold several companies and projects including:</p> <ul style="list-style-type: none">• Antioch Real Estate, Inc.• Accuimage, Inc.• Excelsior Air Charter, Inc.• Urotrade, Inc.• Celestre Aircraft Leasing <p>1984-1990 Bear Stearns, Inc. 1980-1984 Kidder Peabody, and Co. Licensed stock, bond and annuity investment counselor with more than \$500MM under management. Managed individual clients' portfolios, including CEOs, CFOs, and well as corporate cash management portfolios.</p>
Education	1977 San Francisco State, Master of Arts in Music Theory 1963 University of California, Berkeley, Bachelor of Arts in Philosophy



Mark Dennehy

President and CEO

CAREER PROFILE Mr. Dennehy has over 10 years of experience in project oversight and operations analytics. Recruited in 2008 to design and implement quality assurance programs for all departments within Comira, Mr. Dennehy also led the business model transition for the FAA resulting in the development of new training programs, audit systems, and site inspection processes. His work set the standard for programs within the Airmen Knowledge Testing program.

PROFESSIONAL EXPERIENCE

2008-Present

Computer Assisted Testing Service, Inc., Comira

Vice-President, Operations 2008 – March 2012

President & CEO March 2012 - present

- Modernized the technology infrastructure to incorporate the latest availability and security protocols.
- Led the business model transition for the FAA in 2010 resulting in the development of new training programs, audit systems and site inspection processes. Continues to improve and streamline the audit and training process as the program evolves.
- Developed key staff and created new positions to improve the client experience.
- Maintains relationships with the FAA and other Clients.
- Has a hands-on approach to the training and inspection process and often visits various sites to set-up, train and inspect new personnel.

2005-2008

Kjeldsen, Sinnock, and Neudeck, Inc., Stockton CA

Senior Technician

- Responsibilities included coordination of topographic, bathymetric, photogrammetric, remotely sensed, and geographic information data; cartography using this data creating industry standard civil land survey maps for use in engineering, topographic, and boundary maps.

Education

2004 AS Engineering Technology, San Joaquin Delta College, Stockton, CA

2008 Certificate Geographic Information Systems, American River College, Sacramento CA



Michael S. Finger, PhD

Manager of Psychometric Services

CAREER PROFILE	Dr. Finger is the Manager of Psychometric Services, and brings with him a wealth of psychometric knowledge, experience, and practical know-how in the development, administration, and scoring of standardized assessments.
PROFESSIONAL EXPERIENCE	<p>2013-Present Computer Assisted Testing Service, Inc., Comira Manager of Psychometric Services</p> <ul style="list-style-type: none">• Lead team in psychometric work (job analyses, exam development, etc.)• Lead efforts in bringing future enhancements to Comira's Remote Item Authoring System (RIAS) <p>2012 PSI Services, LLC Manager, Psychometric Services</p> <ul style="list-style-type: none">• Led team of psychometricians responsible for the design, development, and maintenance of national certification examinations, including the development and execution of national practice analyses. <p>2008-2012 American Institute of Certified Public Accountants (AICPA) Senior Psychometrician, 2010-2012 Psychometrician, 2008-2010</p> <ul style="list-style-type: none">• Supervised and mentored Examinations Team psychometricians and direct reports. Served as staff liaison for the Uniform CPA Examination's psychometric advisory committee (POC) composed of leading experts in the psychometrics community. <p>2003-2008 Pearson Psychometrician II, Custom Assessments Area – 2006-2008 Psychometrician, Evaluation Systems Area – 2003-2006</p> <ul style="list-style-type: none">• Lead psychometrician on large-scale educational assessment programs <p>2000-2003 University of Kansas, Department of Psychology Assistant Professor in Quantitative Psychology</p>
Education	<p>2001 University of Minnesota – Twin Cities, PhD in Psychometric Methods</p> <p>1993 University of Central Florida, BSc in Psychology/Statistics Minor (Summa Cum Laude)</p>



Mark Larson

Senior Applications Engineer

CAREER 8+ years of professional experience designing and developing software, using
PROFILE Java/J2EE, Swing, SQL, Struts, PHP, PERL, SOAP, and JavaScript.
PROFESSIONAL **2003-Present**
EXPERIENCE **Computer Assisted Testing Service, Inc., Comira**
Software Engineer

Simulation Test Driver – Java Swing Application

- A distributed computer-based testing application where a real-life scenario unfolds for an examinee. Examinee makes decisions based on information given. Client software implemented with a Java Swing client and J2EE backend.
- Collaborated successfully with a team of developers
- Worked with clients to meet test requirements
- Multi-threaded programming environment
- Utilized MVC Architecture to separate logic from data model
- Developed DAO/EJB to handle transactional code
- Extensive documentation of project
- Modified database schema for new requirements
- Created Ant scripts for building and deploying
- Collaborated with other developers using CVS
- Developed photo capture system for extra security integrating ActionScript/Flash with Java application

Remote Item Authoring System (RIAS)

RIAS is a web based J2EE Item Bank application where Subject Matter Experts collaborate to create test questions/test forms used for professional licensing and certification exams.

- Worked closely with psychometricians to design usability features and statistical analysis algorithms
- Developed XML import/export functionality for transferring test items in and out of item bank (QTI XML format)
- Leveraged jQuery utility for charts and other web page enhancements
- Implemented J2EE solution using JBoss and MS SQL Server
- Developed web interface with JSP, Servlets, and Struts, observing MVC model 2 architecture
- Implemented PDF/Excel export for exam forms using iText

EDUCATION 2003 San Jose State University, BSc Computer Science/Mathematics Minor
CERTIFICATION UNIX Systems Administration Certificate, San Jose State University



Lindsay M. Brent

Client Relations Coordinator for Computer-Based Testing and Psychometric Services

CAREER PROFILE	Psychometric and psychological research background, with emphases in social science survey methods, statistics, and teaching/training.
PROFESSIONAL EXPERIENCE	<p>2012-Present</p> <p>Computer Assisted Testing Service, Inc., Comira</p> <p>Client Relations Coordinator for Psychometric Services</p> <ul style="list-style-type: none">• Assistance in the development of certification exams vis-à-vis psychometric standards• Collaborate with psychometricians in the production and delivery of client RFPs and reports• Provide psychometric and administrative support for job task analysis, item writing, and cut score workshops• Assist clients with secured Remote Item Authoring System (RIAS)• Collect, manage, and analyze data using in-house item-banking software, Excel, and SPSS• Communication with current and potential clients regarding psychometric services <p>2011-Present</p> <p>San Francisco State University</p> <p>Senior Lab Manager – SPAMS Research Lab</p> <ul style="list-style-type: none">• Development and organization of lab research groups• Assistance with literature review, data entry, and data analysis• Computer and software maintenance/updates• Personnel management and research assistant hiring• Research conference preparation and presentation <p>2007-2011</p> <p>California State University, Sacramento</p> <p>Assistant Instructor for Lower and Upper Division Psychology</p> <ul style="list-style-type: none">• Taught Research Methods and Statistical courses for both lower and upper division majors in psychology.• Taught basic and advanced descriptive and inferential statistics, and reviewed basic and advanced research methods (e.g. ANOVA, Regression, Chi-square).• Supervision and consultation of student research projects.
Education	<p>2013 San Francisco State University, Masters in Social Psychology, Emphasis on Survey Methods and Development (Expected)</p> <p>2011 CSU, Sacramento, BA Psychology</p>



Claude Earl “Rory” Rorabaugh

Director of Sales and Marketing

CAREER PROFILE **Business ownership, marketing and business development, multi-units operations and program management. Has served as both an appointed and elected official in Washington State.**

PROFESSIONAL EXPERIENCE **2010-Present**
Computer Assisted Testing Service, Inc., Comira
Director of Business Development

- Has a leadership position for the overall marketing, promotions of Comira test delivery and psychometric services.
- Has input and collaborates with CEO on management of marketing and operations.
- Actively communicates with current and potential clients regarding CBT and psychometric services.

2005-2010

Portland Cement Association

Northwest Regional Director of Promotions

- Northwest Regional Director of Promotions for a national not-for-profit trade association.
- Acted as a lobbyist in Washington State, Oregon and Idaho legislatures, called on public works officials and architectural and engineering firms promoting concrete and portland cement products.

1999-2005

LaserGrade Computer Testing

VP of Sales and Marketing, Vancouver, WA

- Role similar to his current role with Comira

1980-1988, Sylvan Learning Centers

- Held key positions as an officer of Sylvan Learning Centers (franchisor), Seattle, WA

EDUCATION 1976 Central Washington State College, Ellensburg, WA. BAS in Marketing and Communications.

1973 Edmonds Community College, Edmonds, WA. AAS with a journalism emphasis.

CLIENT REFERENCES

FEDERAL AVIATION ADMINISTRATION

Type of Work

Examination Services

Period of Performance

Approximately 20 years

Client Contract/Client Technical Contact

Ryan C. Smith, Program Manager
Federal Aviation Administration
AFS-630
PO Box
Oklahoma City, OK 73125
Phone: 405.954.6742
Fax: 405.954.1122
E-mail: ryan.c.smith@faa.gov

Description of Project/Relevance

Examination services include candidate support and scheduling through our in-house call center team, test administration, issuing score reports, producing customized reports. Typical testing volume ranges from 50,000 to 60,000 annually.

Major program accomplishments include implementing a highly secure Internet test delivery system to provide instant examination results to the candidate, without requiring a local data server at each testing center. Additionally we have developed tools and methodologies as a FAA Organization Designation Authorization for both CATS and another test provider, with ongoing proctor training, site audits and other administrative services for test sites at geographically dispersed US domestic and International locations.

CLIENT REFERENCES

AMERICAN CULINARY FEDERATION

Type of Work

Examination and Psychometric Services
Internet-Based Delivery of Practice and E-Learning Modules

Period of Performance

5+ Years

Client Contract/Client Technical Contact

Sandy Friend, Director of Certification
American Culinary Federation
180 Center Place Way
St. Augustine, FL 32095
Phone (Office): (800) 624-9458, Ext. 106
Phone (Direct): 904-484-0206
Email sfriend@acfchefs.net

Description of Project/Relevance

Examination services included development, publishing, and administration of high-level, professional chef certification examinations. Also, candidate call center support, candidate scheduling services, score reporting, and customized examination reports. For 2013, Internet-based delivery of non-proctored e-Learning and practice exams.

Psychometric services included job analyses, development of test specifications, item and test form development, cut score studies, score reporting, and ad hoc statistical analysis.

CLIENT REFERENCES

OPERATING ENGINEERS CERTIFICATION PROGRAM

Type of Work

Psychometric Services

Period of Performance

Fall 2012 – Present

Client Contract/Client Technical Contact

Ron Havlick, Executive Director, Operating Engineers Certification Program
4204 Riverwalk Parkway, Suite 220
Riverside, CA 92505-3377
Phone: (951) 351-4001
rhavlick@oecp.org

Description of Project/Relevance

Provided psychometric services to the certification program for professional crane operations. Ongoing consulting includes work in examination development, administration of practical examinations, job analyses, test specifications, and annual accreditation reporting.